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Follow-up and social impact assessment (SIA) in urban transport-infrastructure projects: insights from the parramatta rail link

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ABSTRACT

In assessing the social impacts of major urban transport-infrastructure projects Impact Assessment (IA) practitioners determine and facilitate the equitable distribution of project benefits and costs. They do this in a context of governmental policy objectives and stakeholder interests. Public investment in transport projects shapes contemporary planning of urban Australian cities, addressing common challenges of rapid and sprawling population growth. Politically-driven ‘urgency’ in delivering new infrastructure, raises questions about long-term strategic benefit and delivery of the positive social and environmental outcomes that often frame their announcement.

Follow-up to assess outcomes against policy objectives and stakeholder interests, however, is rare and tools to facilitate genuine public accountability through project phases are lacking. This paper discusses the need for better management and follow-up of social impacts from urban transport-infrastructure projects. Drawing insights from a review of the (partial) delivery of the former NSW Government’s Parramatta Rail Link project, it evaluates social impact management strategies applied against the achievement of social and transport policy objectives. Lessons introduced highlight the constraints and limitations on good practice IA and Social Impact Assessment, the importance of early practitioner and community involvement and that political decision-making for urban transport-infrastructure has the greater influence on delivering social outcomes.

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Introduction

Australian cities are experiencing a period of disruption as major transport-infrastructure projects are developed with urgency to meet population demands. Announced with much political fanfare, these projects promise to deliver public benefits and are subject to considerable Environmental Impact Assessment (EIA) during approval processes. The political urgency that frames advocacy of rapid expansion of investment in infrastructure in Australia’s major cities aims to create significant economic and social change and is routinely marshalled to secure wider political mandates (Legacy 2017). Yet public reporting of and accountability for delivery on the beneficial social outcomes from projects is at best poor, and at worst, inaccurate or misleading. And follow-up of project outcomes against EIA and Social Impact Assessment (SIA) predictions is rare. Through review of recent literature and experience, this paper highlights the relevance of social impact management practices in the evaluation of major-infrastructure projects against policy outcomes. It discusses good practice concepts in SIA and EIA Follow-up and the strategic planning context in which they operate. It concludes there are strong arguments for better management and follow-up of social impacts

from major transport-infrastructure projects, and their performance against assessment predictions and policy objectives used to frame project planning approvals to facilitate accountability for outcomes. It offers a case study of the evaluation of social impact management strategies applied against policy objectives of the (partial) delivery of the Parramatta Rail Link (PRL) for Sydney.

Problem background: evaluating the success of major infrastructure projects in society

Rapid planned growth of, and investment in, Australian transport-infrastructure, particularly in Sydney, in the next 20 years requires governments and project managers to monitor expediently and respond to social effects of these activities in the longer term (Infrastructure NSW 2018). Public criticism of and interest in such projects increases as society becomes more empowered and invested in proposals through community engagement practices in governance and development EIA processes (Esteves, Franks, and Vanclay 2012; O’Faircheallaigh 2009). As part of development assessment, SIA influences fair and equitable distribution, avoidance and management of social impacts (Ziller 2012). An SIA report is typically presented as

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an Appendix to an Environmental Impact Statement (EIS), albeit downplayed by presentation in this context (Vanclay 2003). Good practice in EIA and SIA often reflects an iterative process of identifying and managing adverse outcomes during all project phases (Vanclay et al. 2015). Yet, once projects are approved, follow-up on project-scale assessment reports is rare (Nogrady 2013; Morrison-Saunders, Arts, and Marshall 2007).

Two broad approaches to follow-up can be distinguished. One approach considers the extent to which the project approved is actually delivered once post-approval modifications occur. The other considers the actual impacts of the delivered project, and the efficacy of impact mitigation and management responses recommended in the pre-approval impact assessment processes. For major transport-infrastructure projects, project purpose is often framed in very broad strategic terms such as city or regional scale transport planning, macroeconomic policy goals and future proofing economically and strategically significant connections. In the absence of broad Strategic Environmental Assessment (SEA)'s of strategic plans (see Therivel 2004) and considering the Australian preference for project-based assessment and approval, the need for clear statement of project purpose and assessment and post-approval evaluation against that purpose is necessary to provide a framework that builds political accountability, public trust and project effectiveness.

Project success, however, even for strategic infrastructure projects is most commonly discussed publicly in terms of on-budget and/or on-time completion. Yet the social benefits promoted as justification for major transport projects, are frequently not measurable using either time or budget frames (Flyvbjerg 2014). Flyvbjerg, Bruzelius, and Rothengatter (2003) suggest a paradox exists between the significant societal benefit of infrastructure mega-projects and their poor performance in economy, public support and environmental impacts (see also Flyvbjerg 2014). Cost overruns and lower-than-predicted revenues frequently limit project viability and are commonplace globally, reported in Europe, Africa and Australia (Flyvbjerg, Bruzelius, and Rothengatter 2003; Terrill and Danks 2016). Predicted economic, social and environmental impacts identified in business cases, cost-benefit analyses and EIAs, are often miscalculated or under reported, leading to excessive scrutiny and public distrust in both projects and decision-making (Flyvbjerg, Bruzelius, and Rothengatter 2003; Flyvbjerg 2014). Trust, public participation, governance and accountability in the political decision-making process, therefore, weigh greatly on the success of SIA practice, influencing the practitioner's input during the assessment process (Flyvbjerg, Bruzelius, and Rothengatter 2003).

Aligning social and transport policy goals may assist projects in successfully meeting the needs of the public

(Hale 2011). Defining long-term goals for urban transport-infrastructure projects and systems is typically done at metropolitan and regional scales. While they might be framed at the metropolitan-scale, projects inevitably have implications at both a wider whole-of-society scale and the scale of affected local communities (Hale 2011). EIA practitioners reviewing project proposals have a responsibility to balance governments' system-wide and public policy goals with proponent, societal and determining authority objectives in developing monitoring strategies. In reality, as Serje (2017) notes, the societal-scale changes in social relations created by projects, plans and policies are poorly conceptualised and hardly considered in many SIAs. As such, it is relevant to consider what might be good practice in SIA.

Good SIA practice and management of social impacts

SIA literature abounds with 'state of the art' practice reviews (eg Burdge and Vanclay 1996; Vanclay 2003; Vanclay and Esteves 2011; Esteves, Franks, and Vanclay 2012; Vanclay et al. 2015; Arce-Gomez, Donovan, and Bedggood 2015). Good practice in SIA, however requires EIS practitioner teams (typically led by physical scientists, project managers and decision-makers) to possess appropriate experience in the social sciences foundational to SIA (Ross and McGee 2006; Ziller 2012; Arce-Gomez, Donovan, and Bedggood 2015). The SIA literature emphasises the need for community participation and engagement using social science methods, particularly in influencing whether management strategies proposed to address predicted impacts will deliver desired policy outcomes, and fair, equitable, and justifiable distribution of project impacts, including effects on disadvantaged groups (eg Howitt 1989; Howitt and Stevens 2016; O'Faircheallaigh 1999, 2009).

Good practice methods for post-approval management of social impacts require preparation and implementation of Social Impact Management Plans (SIMPs) (Vanclay et al. 2015). Franks and Vanclay (2013) emphasise the need for SIMPs to include continued engagement of impacted impact communities during monitoring and management as important in achieving successful social outcomes. Despite academic advocacy of SIMPs, they remain uncommon in practice unless legally mandated in project approval conditions by regulators (eg DPI 2012). In contrast, post-approval Environmental Management Plans are commonly implemented as an industry-accepted standard response to EIA reports.

EIA follow-up

The idea of EIA follow-up is well-established, with the International Association of Impact Assessment (IAIA), defining it as 'the monitoring, evaluation,

management and communication of the environmental performance of a project or plan' (Morrison-Saunders, Arts, and Marshall 2007, 1). EIA follow-up provides opportunity to evaluate the accuracy of predictions and the effectiveness of management strategies proposed. The value proposition for follow-up is widely acknowledged in terms of lessons learned, practice improvements, impact management and achieving sustainable outcomes in delivering projects, strategic policies, plans and programs (Morrison-Saunders, Arts, and Marshall 2007; Morrison-Saunders, Baker, and Arts 2003; Arts and Faith-Ell 2012).

Good EIA follow-up may also assist affected communities to understand the environmental performance of an activity, engaging with them to resolve concerns that may have arisen post-approval (Morrison-Saunders, Baker, and Arts 2003). In large infrastructure projects, EIS processes are undertaken with best knowledge available, but uncertainties often remain and require post-approval project design modifications. Consequently, pre-approval impact predictions and projections may become inaccurate or irrelevant by the time projects are delivered (Storey and Jones 2003). EIA follow-up that reviews project performance against study predictions and policy objectives help to address uncertainties through monitoring, adaptive management and contingency planning (Storey and Jones 2003; Franks and Vanclay 2013).

While there are many types of EIA follow-up (see Arts and Morrison-Saunders 2004) there is little research regarding the extension of these tools to SIA. Environmental impacts are readily regulated through established monitoring practices and governance frameworks, such as environmental management systems and plans and have standards related (eg the *International Standardization Association (ISO) 14001*), yet equivalent tools for managing social impacts are not widely accepted (Franks and Vanclay 2013; Storey and Noble 2005). This is due in part to methodological difficulties that face SIA follow-up (eg. Gagnon 2003) and the absence of suitable tools for monitoring management strategies (Cashmore, Bond, and Sadler 2009; O'Faircheallaigh 2009).

Managing the social impacts of transport development in Sydney: local context

Strategic urban planning & follow-up

The *Greater Sydney Region Plan - A Metropolis of Three Cities* (Greater Sydney Commission 2018), *Future Transport Strategy 2056* (Transport for NSW (TfNSW) 2018a) and *State Infrastructure Strategy 2018-2038* (Infrastructure NSW 2018) set the strategic context for land use, transport and infrastructure planning in Greater Sydney.

While these plans and policies are set externally to political cycles, accountability for achieving objectives is ostensibly secured through legally-enforced management strategies, regulated by the Department of Planning and Environment (DPE) and other agencies in individual project approval conditions (Preston 2015; see DPE 2017b) or if state-funded, through the NSW Treasury's internal compulsory seven-gate project-lifecycle review; the *Gateway Review Process* (NSW Treasury 2017).

The role of impact assessment

Strategic plans and concept designs are assessed under the *Environmental Planning and Assessment Act 1979* (The Act). The Act requires significant developments to complete an EIS that identifies and assesses environmental, social and economic impacts to inform decision-making on whether a development should proceed (see Part 4 & Part 5). Section 1.4(1) defines environment as including:

all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings.

SIA, however, is not explicitly mandated for government projects. What is mandated is that 'social' factors should be considered by public authorities,¹ the public must be consulted² and the principles of ecologically sustainable development must be considered³ (Preston 2015). Any requirement for or commitment to SIA, is determined by the DPE following an application, the government body/proponent (see section 5.1 of the Act), established DPE SIA guidelines (see DPE 2017a) or the practitioner scoping EIS requirements.

Urban-scale plans and key infrastructure projects are inevitably highly politicised and in Australia have been characterised by poor transparency, top-down and bottom-up antagonism and poor delivery against strategic goals (Legacy, Curtis, and Scheurer 2017). Strategic infrastructure plans are not assessed using SEA, and project-specific SIA criteria are often poorly matched to key impacts of projects as-delivered. While SIA follow-up focused on either of these elements would increase transparency and accountability, there is no political appetite to mandate either SIA or follow-up reviews. In that case, there will be increased reliance on securing improved SIA practice wherever possible, and a need to encourage academic research that undertakes follow-up evaluations of projects independently.

Parramatta rail link: exemplar of good practice or lessons to be learned?

Methodology

To further investigate these issues and their consequences in the follow-up and management of social

impacts of major transport-infrastructure projects, a critical assessment was undertaken using a specific Sydney-located case, the PRL. The PRL was selected as:

- Adequate passage of time to evaluate management strategies proposed,
- Sufficient temporal distance from the decisions to allow participants to reflect freely on issues raised, and,
- Both social and transport goals as a major urban infrastructure project were targeted by the project.

In reviewing the assessment and decision making around the PRL, three methods were utilised; (1) Literature review, (2) Case study analysis and (3) Semi-structured interviews:

- (1) Literature review established the nature of the research as well as good practice SIA benchmarks, including local and international guidelines, policies, legislation and plans publicly available.
- (2) PRL documents were reviewed, including the EIS, policy documents and relevant secondary sources. This supported documentation of a timeline of events, field investigations and interview discussions.
- (3) Semi-structured interviews with contributors to the PRL case were undertaken during June to August 2016, with a total of 17 key informants (see Table 1). Participants may have undertaken more than one role.

Selection focused on those whose decisions contributed to the outcomes of the project. Third party stakeholders affected by decisions were also consulted to balance the perspectives of decision-makers. Key findings of interviews were transcribed and analysed using coding and theming and reflexive memos were used to identify common themes, ideas and relationships for further consideration (Cope 2016; Dunn 2016).

Historical context

A heavy rail system connecting the Northern suburbs of Sydney via the West appeared as early as Bradfield's thesis as a St Leonards to Eastwood connection

(Bradfield 1924; Gooding 2009). The PRL was first announced in the NSW Government's *Action for Transport 2010, an integrated transport plan for Sydney* (Action for Transport 2010) in 1998 and was approved over 15 years ago (see Table 2) (DoT 1998). A 27 km extension to the existing Sydney rail network was proposed, which would link Parramatta and Chatswood via Epping (Figure 1) (DoP 2002; ERMK 1999).

In addition to *Action for Transport 2010*, several other NSW government plans indicated that the PRL was fundamental to achieving common transport-oriented policy objectives; to reduce car dependency, increase public transport usage and create more accessible transport opportunities to access employment and economic centres cross-regionally in Sydney (ERMK 1999). There was, however, no specific SEA that reviewed the ways in which the PRL would meet governments' high-level strategic transport objectives. As the project that was proposed and subject to EIA review and the project as-delivered were ultimately quite different, this makes evaluation of the project's delivery against its stated purpose very difficult.

Key socio-economic impacts and benefits predicted in the EIS primarily included (ERMK 1999):

- No loss of social cohesion or severance due to tunnelling methods,
- Improved accessibility to services and employment,
- Improved amenity, transport and housing choice,
- Equity benefits in terms of urban planning and mobility for residents;
- Intensification of commercial and residential development along the alignment; and
- Temporary construction-related impacts on local access and amenity, such as increased noise and vibration.

No separate specialist SIA study was prepared. This absence means that many of the predicted social effects of the project were not subject to rigorous scrutiny, which makes formal follow-up to evaluate the efficacy of proposed impact mitigation and management strategies also very difficult.

The proposed route (Figure 1) included key components (PRL Co. 2001, 1–5, 1–6):

Table 2. Parramatta rail link - key statutory dates.

Event	Date
<i>State Environmental Planning Policy (SEPP) No. 63</i> is gazetted to facilitate the approval of projects in <i>Action for Transport 2010</i> .	2 February 2001
Approved with 260 conditions, under Part 5 of the <i>NSW Environmental Planning and Assessment Act 1979</i> by the Director-General of the DOP (DoP 2002).	27 February 2002
Approval modifications for the Epping Transport Interchange, Chatswood Transport Interchange and Parramatta Transport Interchange redevelopments.	17, 28 June & 14 December 2004

Table 1. Parramatta rail link case study research participants.

Category	Description	No. of Participants
Practitioner	Project Consultants: EIA practitioners and construction personnel	5
Third Party Stakeholder	Key affected third party stakeholders	5
Government Official	Politicians, regulators, government bureaucrats, proponents	7

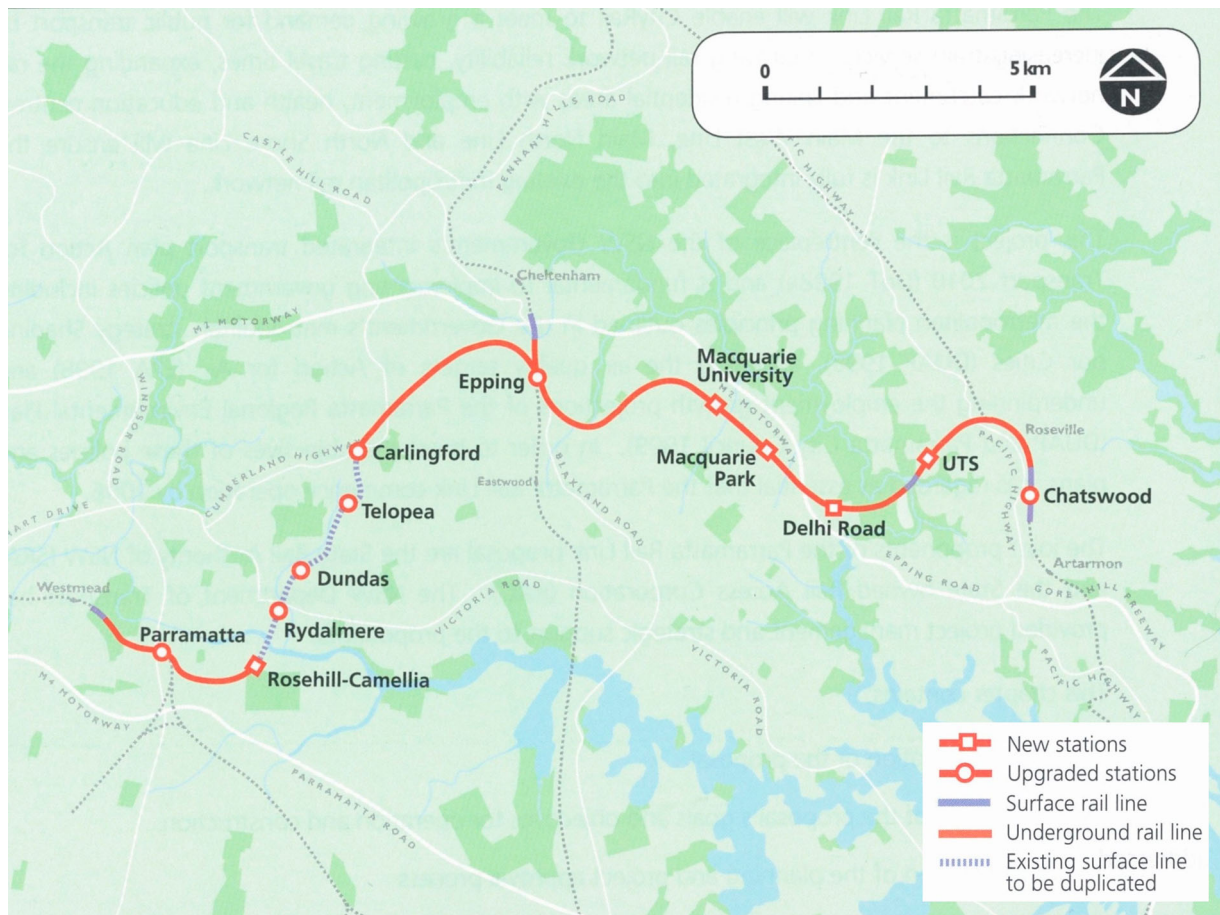


Figure 1. PRL Alignment. Source: ERMK (1999, 1–2, Figure 1.1)

- A twin track railway linking the North Shore Line, Main North Line and Main West Line;
- Dive structures to connect the PRL with existing rail corridors;
- Upgrading of existing stations;
- New Stations at Macquarie University, Macquarie Park, Rosehill/Camellia, Delhi Road (North Ryde), University of Technology, Sydney (UTS) (Ku-ring-gai);
- Duplications of surface track along existing Carlingford Line between Carlingford and Camellia, on the North Shore Line rail corridor near Chatswood and near the dive structures at Westmead and Epping;
- 800-vehicle carpark at Carlingford Station;
- Easy access and Bicycle storage facilities at all stations; and
- Noise barriers along the Carlingford Line

The PRL was expected to have four to six trains per hour each way between Epping and Parramatta, and eight to ten trains per hour each way between Chatswood and Epping (ERMK 1999). The initial capital cost was estimated in the EIS at \$1.4 billion.

During the approval, design and consultation processes, the proposal underwent significant design modifications. This included removal of a proposed bridge through the Lane Cove National Park (LCNP)

in favour of a tunnel option and the cancellation of the UTS (Ku-ring-gai) station. Following the modifications, costs increased to \$2.3 billion (Auditor-General 2005) resulting in only the first stage of the proposal, the Epping to Chatswood Rail Link (ECRL), being delivered in 2009 (Figure 2) (CityRail 2009). The ECRL operates four to six services each way per hour, starting at Chatswood on the 'T1 North Shore & Northern' route.

In 2003, the second stage of the proposal, the Parramatta to Epping Rail Link (PERL) was postponed, as a result of a redraft of the state government's transport plan by the incoming Transport Services Minister (Kerr 2003). In February 2011 it returned to the state agenda with a promise co-funding of \$2.1 billion from the Federal Labor Government, only to be postponed again in 2013 until 2019/2020, subsequent to a funding request rejection and a change from Labor to Coalition at the state level (Robins 2011; Aston 2013).

As a result, the as-constructed project did not achieve a key public policy purpose articulated in *Action for Transport 2010* (DoT 1998): to improve public transport from Western Sydney's Parramatta and connect commuters to growth centres in the North-West.

In 2018, the NSW Government announced the planning approval to convert the Camellia to

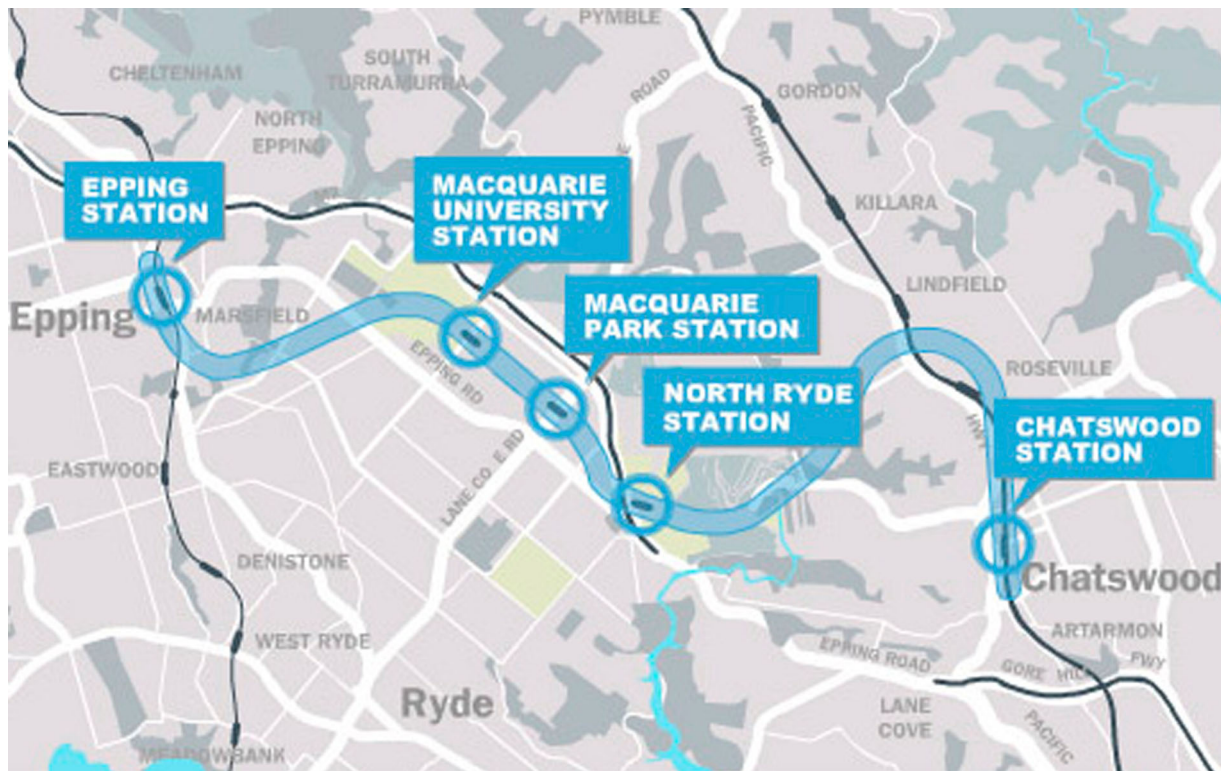


Figure 2. ECRL Alignment. Source: Transport Infrastructure Development Corporation (2008)

Carlingford section of the Carlingford Line (on the PERL alignment) for the Stage 1 Parramatta Light Rail project and an extension of this to Epping is under investigation, which completes the connection from the West to the North-West (TfNSW 2018b).

The ECRL is also being replaced, with a rapid transit metro service integrated into the 36 km Sydney Metro Northwest project, increasing services to 15 in both directions during the peak (TfNSW 2017).

Results: key insights in the management of social impacts

Discussions with interviewees concerning the EIA and approvals process for the PRL highlighted strengths and weaknesses of methods utilised to prepare the EIS. Practitioners felt the process was effective, involving a ‘massive team of people’ and that it was probably one of ‘the most complicated EIS’ prepared at that time. Practitioners also noted one of the most challenging aspects were the political pressures placed on the process through unrealistic (‘ridiculous’ and ‘completely unachievable’) initial timeframes and Ministerial expectations given for the design progress:

we didn’t have a project definition ... Fundamentally it takes a long time to plan complicated infrastructure, it’s not a quick tick off process (Practitioner 1).

These problems also challenged the initial scoping of the EIS, placing pressures on assessment timeframes. The client’s ‘set view on the option’ [to build a bridge

through the LCNP] also influenced the capacity of the assessment to appropriately investigate issues viable design alternatives for the proposal (Practitioner 1). This later proved significant for the project, as the absence of robust assessment of alternatives for crossing the Lane Cove River emerged as a weakness of the EIS that could have been addressed with a stronger strategic justification presented to the community (Practitioner 2).

EIA practitioners interviewed stressed the importance of community and stakeholder consultation as fundamental to good practice and most felt that the process was extensive, and the community understood the impacts and benefits. The proposed bridge in LCNP engendered much community comment and ultimately influenced a significant project design change to a tunnel option (Practitioner 1, 2; Government Official 1, 2). As a weakness of the process, several participants commented that the community voice was overly influential on the progression of the project and inhibited its progress.

When the bridge option was first shown to the community as part of the EIS:

There was a lot of worry from the community about visual impacts ... so, once the momentum got going on ... they were able to mount an argument that was unable to be countered by the EIS or the evaluation that [DoP] did. So the route had to be changed (Government Official 2).

Some participants concluded that the local community views were not representative of the wider society view

and that the government did not ensure the 'greater good' was secured (Government Official 3). This meant that the initial public policy objectives were compromised, as the final design solution produced significant cost increases and negatively influenced political decision-making for the PERL.

The lack of transparency around how decisions were made by the government also emerged in discussion. Although the EIA practitioners believed they provided technical advice regarding the need for the PRL, the cancellation of the PERL was a political decision. In the end, there was 'no role in the planning system to influence these decisions in the outcome' (Practitioner 1). Practitioner 2 reflected that the PRL, '... was a classic example when you can get the planning approval, but the money committed only allows for half the project.'

More seriously, the political nature of the decision-making marginalised expert advice:

it went to Cabinet as the Chatswood to Parramatta Rail Link project, and came out of the Cabinet that day, as the Chatswood to Epping Rail Line. The primary reason was, there is no demand and we can't afford it ... putting aside the strategic policy and plan ... [meant there] was a political decision in the end ... without getting expert advice (Government Official 2)

In other words, the existing design and assessment was overturned in Cabinet in expedient response to political pressures, without reference to an evaluation of the modified project against established policy or project objectives. Practitioner 1, reflecting on this Cabinet decision, remarked 'really, it was a political decision, not a technical decision'. Government Official 1 further commented that:

The amazing thing is that there is a process to get a decision in favour of something, but there's no process for cancelling something. So a Premier comes out and says, 'oh well, we've decided we're not doing that'. It's just like building something takes a long time, destroying something is done in a moment.

Adding to the complexity of this, Government Officials 1, 3 & 4 and Practitioner 3 all commented that sufficient funds were never allocated to complete the PRL and the Minister's decision required the reallocation of funds to allow the PERL to be built.

Difficulties in the management and monitoring of social impacts over different spatial and temporal scales were noted in the PRL case study. Government Official 3 highlighted that in public transport-infrastructure planning, the consideration of the broader social issues and effects of proposals must be strategic in the business case because impacts of linear alignments that affect multiple communities and local governments cannot be resolved at the project-scale. This is linked to how management strategies can be judged

against policy objectives, which are typically set at the metropolitan-scale, rather than the project-objective-scale at which they are monitored by approval conditions (Government Official 3). Government Official 6 also added the planning system is designed to prevent unacceptable social impacts proceeding so that local councils and MPs have an important role in following up on reported effects if complaints are received.

Other participants reflected that the social impact management strategies proposed in the EIS, were little more than 'motherhood statements' which would be impossible to develop any long-term monitoring strategy from (Government Official 5). As such the legally mandated approval conditions of the PRL focussed on environmental impacts with indirect social effects including water quality and noise and vibration post-operation (Government Official 3).

Participants' conclusions as to whether policy objectives for the project had been met varied considerably. Opinions around the project's success in meeting its policy objectives reflected individuals' views of the government decision to cancel the PERL section. Most participants concluded that the project was at least partially successful in achieving government policy objectives, as the ECRL has had positive social effects.

Three participants, however, disagreed with that conclusion. Government Official 2, Third Party Stakeholder 1, and Practitioner 1 each concluded that the failure of the project to deliver the strategic metropolitan planning outcomes framed for the PRL, (that is, to provide connectivity from the western suburbs to the north-west), meant that it was unsuccessful in meeting policy objectives. Government Official 2 did not believe that any of the *Action for Transport 2010* objectives had been met and that the project failed to provide access at the metropolitan-scale to the most disadvantaged groups in Western Sydney.

Lessons learned and implications

The PRL case study offers lessons in constraints and influences on the assessment and management of social impacts, particularly arising from the development planning and EIA process and in the application of good practice. Many interviewees suggested that the Impact Assessment (IA) practitioner and community are involved typically far too late in project development. Scoping and evaluation of a range of design alternatives was accepted as a key step in wider impact practice (see Burdge and Vanclay 1996), but were not allowed within the scope approved for the initial EIS process. Arguably, this constrained potential for just outcomes from the participatory approach to good practice community engagement applied, as those impacted were not consulted during planning (Lockie 2001; Howitt 1989). Early engagement thus is a

relevant lesson learned, and as part of SIA, offers potential for reflection and mobilisation on social relations, that planners should be open to (Serje 2017).

Participants' comments also reflected on the importance of preparing a thorough business case and strategic argument for infrastructure proposals, and the need for these to demonstrate how the project contributes to meeting strategic policy objectives. Early involvement of expert practitioners, for example, through a SEA, or in this case, a 'strategic social impact assessment', which would scope social impacts and engage the community, would also improve alignment of project objectives with social and transport policy objectives and support improved performance towards long-term policy objectives. Conditions framed to meet specific objectives could then be built into conditional allocation of funding from the NSW Treasury. This would also reduce the 'politics' in assessing the strategic need and alternatives for a proposal. Early assessment also assists in preventing politicians committing to projects ahead of public interest prior to EIA (Terrill and Danks 2016).

While the EIA practitioners reflected on their adoption of good practice EIA for the PRL, other participants' responses highlighted weaknesses in social impact management strategies, particularly for mitigating and monitoring impacts at differing spatial scales. It was also identified that an SIA in accordance with available guidelines was not undertaken (eg Cox 1995). These factors limited the ability for post-approval follow-up and good practice opportunities for management in addressing social impacts. Acknowledging that IA practice has improved since the EIS was prepared (see Vanclay 2003; Vanclay et al. 2015), the application of SIA is not explicitly legislated in NSW and challenges in social impact management remain a weakness in practice (Harvey 2011). These issues are linked to the achievement of PRL policy outcomes to an extent, but they were worsened by political decisions affecting the project development.

The PRL case also demonstrates that project-level IA practice is marginalised in the public-transport decision-making process when political and public advocacy is framed around metropolitan-scale policy outcomes. Good practice becomes irrelevant, when practice is applied only to serve the government decision-maker's objectives, rather than evaluate whether a project is just on social and environmental grounds. It still is the case that while projects are proposed in state-infrastructure plans and rigorous assessments attempted during the planning approval process, the same level of strategic assessment in follow-up is unlikely to occur as a project is modified by political and financial assessments post-approval. Particularly if there is no statutory obligation beyond good governance in treasury processes for further assessment if a project is cancelled or significantly modified in cabinet, such as in the case of the PERL.

Political intervention in infrastructure projects makes it difficult to hold public decision-making accountable for outcomes, even with the application of legally-mandated approval conditions. This results in inequitable and unequal distribution of benefits and risks (Flyvbjerg, Bruzelius, and Rothengatter 2003) and inhibits good practice in follow-up. Practitioners were denied the opportunity to conduct EIA follow-up, which would have allowed them to reevaluate the reconfigured project and generate revised management strategies that could lead to delivery of the desired policy outcomes from *Action for Transport 2010*. Perhaps this reassessment may have led to a different outcome for the PRL: addressing the present strategic policy goals of connecting Western Sydney to the North and without the urgency currently pressuring planners for Sydney (Greater Sydney Commission 2018). Clearly, another important lesson to be taken from this case is that strategic clarity is valuable in making major commitments of public funds to transport-infrastructure projects. Not only is it essential to proper evaluation of project proposals and performance, but also to the transparency and integrity of political decision-making and the long-term credibility of political processes.

Conclusion and future directions

In investigating whether social policy outcomes were met for the PRL project, this paper highlights that political forces, external to the EIA and development assessment processes, intervene in the scoping, design, assessment, approval and management of major projects and have the greater influence on the delivery of social and transport policy outcomes. The IA practitioners' influence is limited by political forces and the constraints placed upon their practice by their client or the relevant government department. This all-too-familiar context for practitioners and urban planners, frequently limits their role in government-led project decision-making.

For political decision makers, the conclusion is that they are responsible for making final decisions and are held accountable at the ballot box in a parliamentary democracy. The *realpolitik*, however, is that ministerial appointments rely on political alliances, not on popular electoral mandates. In the absence of transparency and public accountability in the provision of strategic business cases and project-gate evaluations, political responses to project costs and public engagement risk disrupting delivery against long-term policy objectives and management of both anticipated and unanticipated impacts. In broader societal terms, this risks undermining public confidence in political oversight of the planning system and disruption of social relations that underpin economic and employment outcomes.

So, is it possible, or even desirable, for IA practitioner influence in government-led project decision-

making to increase? Given the findings in this paper, it is difficult to conclude that IA practitioners alone could, or should, change the course of political-decision-making. While a project can be cancelled with no reference to the impacts of cancellation or major modification, and there is little public transparency or accountability. A mandated opportunity to re-evaluate or clear commitment from regulators to follow-up on impact predictions and strategies at both metropolitan and project scales, will assist practitioners to influence the achievement of policy objectives (Arts and Morrison-Saunders 2004).

IA practitioners, with the assistance of regulatory authorities, have an important role to play in encouraging accountability towards delivering policy objectives through accountable and transparent impact management strategies. Practitioners need to include management commitments to be monitored (such as within a SIMP) that relate back to the strategic policy objectives and business case, which can be transferred in to approval conditions. Research is also needed to support improved social impact management and follow-up practices: to plan, evaluate and adapt to the social changes generated by transport-infrastructure in metropolitan cities. Further research must acknowledge and consider the constraints and influences placed on IA in the planning of transport-infrastructure as highlighted by the PRL case, as part of wider discussions in urban planning, governance and project management. Meanwhile, the agendas of urban metropolitan social and transport policies, and the strategic public need, should be considered by planners and expert practitioners while a project is still 'a line on a map', to achieve the greatest potential for delivering equitable social outcomes.

Notes

1. See Clause 228 of the *Environmental, Planning and Assessment Regulation 2000*.
2. See Section 2.22 of the Act.
3. See Schedule 2, Clause 7(4) of the Regulation.

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